



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,406	07/18/2003	HanCheng Hsiung	5760-12400	5015
35690	7590	09/14/2007		
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. P.O. BOX 398 AUSTIN, TX 78767-0398			EXAMINER LU, CHARLES EDWARD	
			ART UNIT 2161	PAPER NUMBER
			MAIL DATE 09/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/623,406

Applicant(s)

HSIUNG ET AL.

Examiner

Charles E. Lu

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Action is in response to the Request for Continued Examination dated 7/30/2007. Claims 1-20 are pending and rejected.

Response to Amendments/Response to Arguments

2. "Section 103(a) Rejections:"

Applicants arguments have been fully considered. The previous grounds of rejection are withdrawn. A new search and consideration was performed. New grounds of rejection are presented below.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-2, 5-10, 13-16, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kampe et al (US 2002/0032883), hereafter "Kampe," in view of Raman et al (US 2003/0217119), hereafter "Raman."

As to claim 1, Kampe teaches the following claimed subject matter:

A system comprising one or more hosts (fig. 2) configured to implement production system (primary component 205), and

A refresh mechanism (software) configured to:

Generate a storage checkpoint of data of the production system (502);

Generate a data clone, wherein data of the data clone comprises data from the storage checkpoint (502-505);

Load new data to the data clone wherein the load updates the storage checkpoint (504);

After the load, switch from previous data of the production system to the storage checkpoint to be the data for the production system (521, 522, para. 0064, the switch happens after data has been loaded to the checkpoint/replica).

Kampe does not expressly teach a production "database," wherein the data is "file system data," and wherein the production database is available for access by users during the load.

However, Raman teaches a production database (primary data storage system), wherein the data is file system data (para. 0053), and wherein the production database is available for access by users during the load (from para. 0050).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kampe, such that it implements a production database with file system data, and wherein the database is available for access by users during the load. The motivation would have been to improve accessibility for file system data, as known to one of ordinary skill in the art and taught by Raman (para. 0049).

As to claim 2, Kampe as applied above teaches performing post-processing on the clone prior to the switching (502-505).

As to claim 5, Kampe as applied above uses a "checkpoint service" and "replica," which must include references to data in the production database or else the data could not be restored to the primary component (see above and para. 0065).

As to claim 6, Kampe as applied above teaches loading new data to the database clone on a host machine hosting the production database (201, note arrow going from 205 to 211, also see fig. 4A).

Kampe does not expressly teach the above loading "to the database clone" to a different host machine.

However, Raman teaches loading data to a different host machine (fig. 1). Kampe also teaches loading data to a different host machine (fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Kampe and Raman, such that the loading new data to the database clone would occur on a different machine. The motivation would have been to allow a system designer to implement the system if the cloning needs to happen on a different machine. This might occur if there were cost, space, processing, or location constraints.

As to claim 7, Kampe as applied above teaches performing the loading of new data to the database clone on a host machine hosting the production database (fig. 2, 201, see "node1," also see above).

Claims 8-10, 13-16, and 19-20 are rejected on the same basis as claims 1-2 and 5-7 above.

4. Claims 3, 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kampe, in view of Raman, further in view of Ishihara et al (U.S. Patent 6,636,876), hereafter "Ishihara."

As to claim 3, Kampe and Raman do not expressly teach stopping the production database prior to the switch and starting the production database after the switch.

However, Kampe may stop the production database before switching, and restarting the production database after switching (para. 0065), because the primary is "restarted" using the "switched" checkpointed data. The production database in this case is the same production database. Ishihara teaches the actual steps of stopping a production database prior to a switch, and restarting a production database after the switch (col. 6, ll. 27-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kampe and Raman, such that "stopping the production database prior to the switch and starting the production database after the switch" is implemented. The motivation would have been to facilitate gracefully switching from one data system to another, as known to one of ordinary skill in the art.

Claims 11 and 17 are rejected on the same basis as claim 3 above.

5. Claims 4, 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kampe, in view of Raman, further in view of Applicant Admitted Prior Art, hereafter "AAPA."

Art Unit: 2161

As to claim 4, Kampe and Raman teach a “production database,” as discussed above, but do not expressly teach wherein the production database is a data warehouse.

However, AAPA teaches that a data warehouse is a database and may be a consolidation of other databases (p. 1, ll. 13-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kampe and Raman, such that the production database is a data warehouse. The motivation would have been to facilitate business decisions, as taught by AAPA (p. 1, ll. 14-19).

Claims 12 and 18 are rejected on the same basis as claim 4, discussed above.

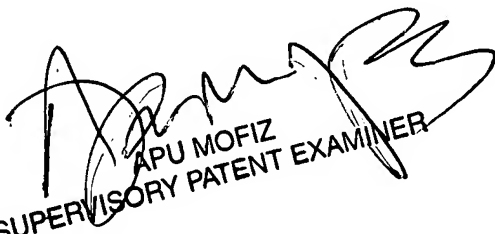
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Lu whose telephone number is (571) 272-8594. The examiner can normally be reached on 8:30 - 5:00; M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached at (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/CL/
Assistant Examiner
AU 2161
9/11/2007


APU MOFIZ
SUPERVISORY PATENT EXAMINER